UCRL-JC-126415 Abs

The United Nations Nuclear Inspections of Iraq: Lessons Learned for Nonproliferation and Arms Control*

Jay C. Davis

Environmental Programs Directorate
Lawrence Livermore National Laboratory

Post-war UN inspections of Iraq have been unique in the history of arms control, combining non-IAEA inspectors, intrusive and unannounced inspections, and the overt use of intelligence information in planning inspections and in guiding teams in the field. Confrontations with the Iraqis forced their disclosure of a multi-billion dollar effort in uranium enrichment and a weapons design program in its early stages. The Iraqis justified this program as a consequence of the bombing of the Osirik reactor in 1981. The program had dual goals, creation of both enrichment capability and a sophisticated infrastructure for mechanical and electronics design and production. Using declassified results from the Manhattan Project, indigenous scientific and engineering manpower, and imports of non-controlled technologies, the Iraqis created electromagnetic isotope separators (EMIS) and support facilities on the scale of the Oak Ridge plant. They also evaded nuclear export controls, successfully bringing into the country sophisticated centrifuge technologies and supposedly controlled materials and machine tools. At the time of its destruction in the war, the electromagnetic separation equipment was beginning to achieve results equivalent to that obtained by the US in WW II. The EMIS complex would have given the Iraqis significant amounts of weapons grade material within 18-30 months. While carried out under unique political and operational conditions, the success of these inspections forces us to address significant issues about future nonproliferation efforts.

---

*Work performed under the auspices of the U.S. Department of Energy by the Lawrence Livermore National Laboratory under Contract W-7405-ENG-48.